

OCCURRENCE IN NORTH JAPAN OF A NEW SPECIES  
OF AN ABERRANT POLYCHAETE GENUS,  
*LYCASTOPSIS*

SHIRO OKUDA (奥田四郎)

*Zoological Institute, Faculty of Science, Hokkaido Imperial University*

TWO FIGURES

(Received July 19, 1937)

*Lycastopsis* is an aberrant Nereid genus founded by Augener (1922). It is mainly distinguished from the allied genera such as *Lycastis*, *Lycastoides* and *Lycastella* in having only 3 pairs of the tentacular cirri. As far as I could ascertain, there have been formerly recorded the following 4 species of the genus from the tropical seas.

*Lycastopsis littoralis* (Grube), 1872. Desterro, Brazil.

*L. beumeri* Augener, 1922. Havana, Cuba.

*L. catarractarum* Feuerborn, 1932. East Java, South Sumatra and Amboina.

*L. hummelincki* Augener, 1933. Bonaire, West Indies.

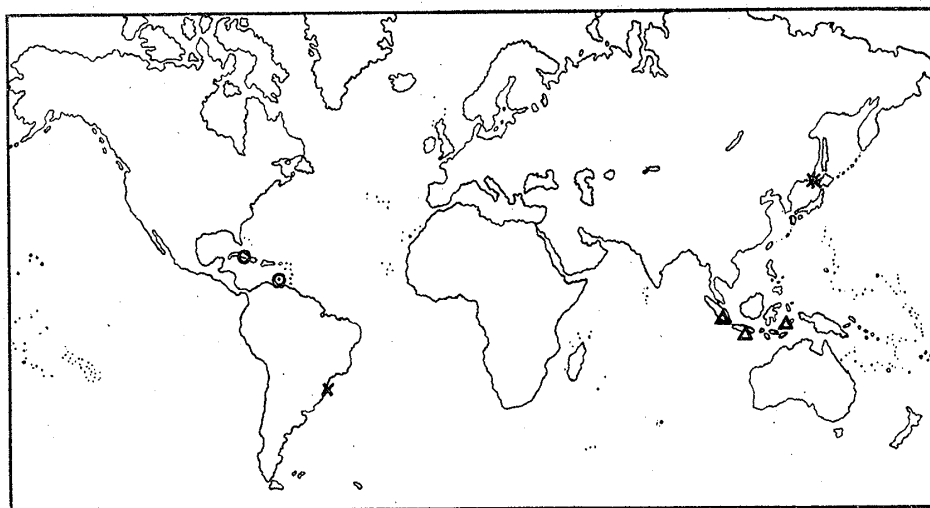


Fig. 1. Distribution map of the species of *Lycastopsis*.

- × *Lycastopsis littoralis* Grube.
- *L. beumeri* Augener.
- △ *L. catarractarum* Feuerborn.
- ⊙ *L. hummelincki* Augener.
- ★ *L. Augeneri* n. sp.

As might be well judged from the distribution of the species, the genus has been known only in the tropical regions, and Feuerborn (1932), describing *Lycastopsis catarractarum* from fresh waters from Java and Sumatra, suggested that the genus may belong to the relic animals which are distributed in the tropics. Therefore, the occurrence of the genus in cold northern waters seems to be rather interesting. The present new species was collected from the littoral zone near high tide mark at Oshoro Bay, Hokkaido in May, 1936. They were abundantly found under decayed sea-weeds living together with the marine oligochaete, *Pachydrilus japonicus* Yamaguchi.

Here follows the description of the species.

Genus *Lycastopsis* Augener, 1922

*Lycastopsis Augeneri*\* n. sp.

(Fig. 2)

The largest specimen measures 30 mm by 1.2 mm for 102 setigerous segments and the smallest one, 10 mm long, has 50 setigerous segments. The head is much broader than long and is of oval form in outline. There is no median groove such as is often shown in the allied genus *Lycastis*. A pair of antennae is very short, horn-shaped. The palpi are remarkably stout, thick and stumpy with rounded terminal knobs. The eyes, which are devoid of lenses, are placed on the posterior border of the prostomium; the anterior pair is the larger, rounded and a little further apart than the posterior pair, each member of which is bean-shaped, longitudinally elongated. The hinder half of the posterior eyes is concealed under the peristomial border. As usual in the genus the tentacular cirri are in 3 pairs. They are rather short and club-shaped tapering gradually to the terminal portion. There is no marked basal joint. The buccal segment is narrower than the succeeding ones. The jaws are of the usual form and possess 7-8 teeth. As shown in the allied genera, *Lycastis* and *Lycastoides*, the parapodium is destitute of the dorsal ramus, which is represented only by a faint folding and a dorsal aciculum. The dorsal cirri are rather stumpy, conical in form and attain the length of the foot. The ventral cirri are short, each with a more or less pointed tip. Acicula black. The ventral ramus has generally 7-8 stout falcate setae and 2 spinigerous setae, but the former varies between 6 and 9 in number and

\* The specific name was chosen in honour of Dr. H. Augener.

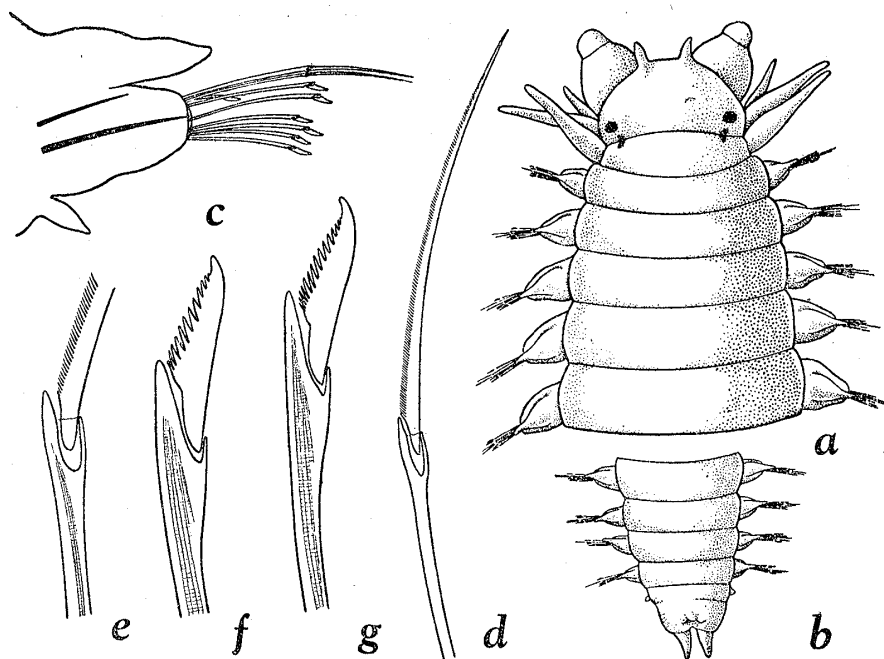


Fig. 2. *Lycastopsis Augeneri* n. sp.

a, Anterior end; b, Posterior end. All  $\times 43$ ; c, 20th parapodium.  $\times 110$ ; d, Spinigerous seta.  $\times 410$ ; e, Jointed portion of the same.  $\times 686$ ; f, Falcate seta.  $\times 370$ ; g, The same.  $\times 680$ .

the latter 1 to 3. Above the ventral aciculum there usually occur 2 spinigerous and 2 falcigerous setae, but occasionally they are reduced in number to only one in each. The falcate setae are stout, markedly heterogomph with a rather long terminal piece and bearing 12-15 teeth. The spinigerous setae are moderately heterogomph with a long, slender, gradually tapering and finely serrated terminal piece. There is no 'Pseudo-Grätenborsten' as shown in *Lycastopsis hummelincki*. The anus is located subterminal. A pair of short anal cirri arise from the ventral side.

*Locality:* Oshoro, Hokkaido (about  $43^{\circ}\text{N}$ ,  $140^{\circ}\text{E}$ ).

*Remarks:* As regards the shape of the falcate setae the species is closely allied to *Lycastopsis catarractarum*, but the present species has a larger number of setae, 7-8 falcate setae instead of 4, and a less number of teeth in the jaw-plate. *Lycastopsis hummelincki* is a distinct valid species in having the 'Pseudo-Grätenborsten'. As to *Lycastopsis beumeri* and *L. littoralis*, Feuerborn suggested that these 2 species may be united into a single one. Owing to the brief description of those two species they cannot be well compared with the

present form, but the former species, *L. beumeri*, has falcate setae with a much shorter end-piece and a less number of teeth.

In conclusion I should like to express my cordinal thanks to Prof. T. Uchida for his kind guidance and also to Dr. H. Augener for his help in consulting literature.

#### LITERATURE

- Augener, H. 1922. Über littorale Polychaeten von Westindien. Sitzber. Ges. Naturf. Freunde, Berlin, p. 42.
- Augener, H. 1933. Süßwasser-Polychaeten von Bonaire. Zool. Jahrb. Syst., Bd. 64, Heft 3/5, pp. 352-355.
- Feuerborn, H. J. 1932. Ein Rhizocephale und zwei Polychaeten aus dem Süßwasser von Java und Sumatra. Verhandl. Internat. Vereinig f. theor. u. angew. Limnologie, Bd. 5, pp. 651-658.
- Grube, E. 1872. Über die Gattung *Lycastis* und ein Paar neue Arten derselben. Jahrsber. Schles. Gesel. f. vaterl. Cultur, 1871, pp. 47-48.